IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

BOURRET, et al. Atty. Ref.: RYM-36-1949

Serial No. 10/560,448 TC/A.U.: 2422

Filed: December 13, 2005 Examiner: Trang U. Tran

For: METHOD AND SYSTEM FOR VIDEO QUALITY ASSESSMENT

August 11, 2011

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

REPLY BRIEF

Appellant hereby submits this Reply Brief under the provisions of 37 C.F.R.

1.193(b) in response to the Examiner's Answer mailed June 21, 2011. The arguments set forth in the Appeal Brief dated April 12, 2011 are incorporated herein. The following arguments are presented in response to new arguments presented in the Examiner's Answer and to further clarify Appellant's previous positions.

Page 4 of the Final Rejection alleges the following:

It is noted the claimed "affecting a sub-field/frame element" can be interpreted as "affecting a sub-field **or frame element** (emphasis original)." It is noted that claims are not limited to only sub-field element but include frame element. Thus, Hu anticipates the claims because they include frame element."

However, page 14 *et seq*. of the Appeal Brief describes how the above allegation of the Final Rejection is erroneous. For example, page 14 of the Appeal Brief states the following:

"The allegation that "affecting a sub-field/frame element" can be interpreted as "affecting a sub-field **or frame element**" is thus erroneous. Instead (and as discussed in more detail below), the proper interpretation of "sub-field/frame elements" can only be interpreted as sub-field elements and/or a sub-frame elements."

The Examiner's Answer (in contrast to the allegations of the Final Rejection)

<u>accepts</u> Appellant's interpretation (page 13 of the Examiner's Answer) as follows:

In response, it is agreed that the claimed 'sub-field/frame elements of a test video field/frame' can be interpreted at 'sub-field elements of a test video field and/or sub-frame elements of a test video frame."

Under the above-described <u>and now accepted</u> interpretation of the claimed "sub-field/frame elements of a test video field/frame" as sub-field elements of a test video field and/or sub-frame elements of a test video frame, Hu fails to disclose all of the claim limitations.

For example, Hu fails to disclose positioning a <u>part</u> of an image. That is, Hu fails to disclose "<u>positioning</u>, ... at least one of the matching <u>sub-field/frame elements</u>"

as claimed -- positioning a <u>part</u> of an image rather than the whole image. Hu does not describe dividing a reference image into parts and positioning or applying a pixel shift to the part(s) independent of the image as a whole.

This difference between Hu's image alignment detection and invention of the independent claims is that Hu is addressing determination of the displacement of a whole, entire image, <u>not</u> the matching of a plurality of subfield/frames of an image – as presently claimed (see reference to "sub-field/frame elements" in the claims – i.e. clearly requiring more than one). Any allegation that Hu describes detecting a shift between parts of two images is erroneous. What Hu actually detects is a shift between two <u>entire</u>, <u>whole</u> <u>images</u> by taking measurements in a part of each image.

Claim 1 requires "positioning, ... at least one of the matching <u>sub-field/frame</u>

<u>elements</u>" (i.e. positioning a <u>part</u> of an image, not the whole image). According to

claim 1, this positioning is carried out to "compensate for <u>misalignment between</u> at

least one of the <u>sub-field/frame elements</u> ..." (i.e. misalignment between a <u>part</u> of the
two images, not the whole images). In claim 1, the <u>sub-field/frame elements</u> are
shifted so that the images match. In contrast, Hu discloses that the images are shifted
so that the test regions or blocks match.

Hu therefore does not describe detecting a misalignment between parts of two images as required by claim 1. There is no teaching in Hu of shifting a part of an image, nor of the matched video field frame - both as required by claim 1. Similar comments apply to claims 17 and 20.

Finally, each of the independent claims requires *three* video field/frames: (i) a test video field/frame, (ii) a reference video field/frame, and (iii) a matched reference video field/frame, wherein matching is carried out between sub-field/frame elements of a test video field frame and a reference video field frame and positioning of sub-field/frame elements to compensate for misalignment between sub-field/frame elements is effected in the matched video field frame.

In contrast, Hu describes only test and reference frames (see, e.g., Fig. 1 of Hu). Hu fails to disclose the matched reference video field frame. Appellant fails to see how the Examiner's Answer rebuts Appellant's above argument regarding the *three* video field/frames.

Conclusion:

For at least the reasons set forth above and discussed in detail in the previously-filed Appeal Brief, it is respectfully requested that the rejections on appeal be reversed.

Respectfully submitted,

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